

## ABSTRAK

**Aulianisa Dina Pratiwi, NIM 4183321003 (2018). Pengembangan Media Pembelajaran Berbasis MOOCs Pada Materi Getaran dan Gelombang di SMA Negeri 1 Percut Sei Tuan**

Sistem sekolah di Indonesia telah berubah karena pandemi COVID-19. Pembelajaran tradisional akan tergantikan oleh pembelajaran jarak jauh (daring). Penelitian ini bertujuan untuk mengembangkan media pembelajaran berbasis MOOCs pada materi getaran dan gelombang yang layak dan efektif digunakan dalam pembelajaran daring. Jenis penelitian yang digunakan dalam penelitian ini ialah jenis penelitian Research and Development (R&D) dengan model pengembangan 4D (four-D). Instrumen yang digunakan ada tiga yaitu, instrumen kelayakan media pembelajaran ditinjau dari ahli media, instrumen kelayakan materi ditinjau dari ahli materi dan instrumen respon siswa terhadap keefktifan media pembelajaran. Subjek dalam penelitian ini yaitu 40 siswa kelas XI MIPA di SMA Negeri 1 Percut Sei Tuan. Hasil penelitian menunjukkan dalam uji coba skala kecil yaitu 10 siswa memperoleh rata-rata 4,55 dan uji coba skala besar yaitu 30 siswa memperoleh rata-rata 4,51 dikategorikan sangat layak. Hasil perolehan nilai 30 siswa kelas XI MIPA-5 memperoleh rata-rata pretest 29,3 dan postest 78,5 jika dihitung dengan gain ternormalisasi menunjukkan nilai gain sebesar 0,58 dengan kategori sedang. Adanya peningkatan tersebut menunjukkan bahwa media pembelajaran berbasis MOOCs pada materi getaran dan gelombang efektif digunakan di SMA Negeri 1 Percut Sei Tuan.

**Kata Kunci:** Getaran dan Gelombang, Media Pembelajaran, MOOCs



## ABSTRACT

**Aulianisa Dina Pratiwi, NIM 4183321003 (2018). Development of MOOCs-Bassed Learning Media on Vibration and Waves in SMA Negeri 1 Percut Sei Tuan**

The school system in Indonesia has changed due to the COVID-19 pandemic. Traditional learning will be replaced by distance learning (online). This study aims to develop MOOCs-based learning media on vibration and wave materials that are feasible and effective for use in online learning. The type of research used in this research is Research and Development (R&D) research with a 4D (four-D) development model. There are three instruments used, namely, the instrument for the feasibility of the learning media in terms of media experts, the instrument for the feasibility of the material in terms of the material expert and the instrument for student responses to the effectiveness of the learning media. The subjects in this study were 40 students of class XI MIPA at SMA Negeri 1 Percut Sei Tuan. The results showed that in the small-scale trial, 10 students obtained an average of 4.55 and the large-scale trial, namely 30 students, obtained an average of 4.51 which was categorized as very feasible. The results of the score of 30 students in class XI MIPA-5 obtained an average pretest of 29.3 and posttest of 78.5 if calculated with normalized gain, showing a gain value of 0.58 in the medium category. This increase indicates that MOOCs-based learning media on vibration and wave materials are effectively used in SMA Negeri 1 Percut Sei Tuan.

**Keywords:** Vibration and Waves, Learning Media, MOOCs

